

**Supplementary Materials:**

GenBank accession number for our nucleotide sequence:

BankIt2526887 Aeromonas OL840900 for Phage AhMtk13a

BankIt2529090 Aeromonas OL840901 for Phage AhMtk13b

Table S1: *Aeromonas* Strains from Collection of George Eliava Institute of Bacteriophages, Microbiology and Virology

Bacteria Isolate	Total Number of Screened Isolates	Isolation Source	Strain ID
<i>Aeromonas hydrophila</i>	39	Water from Georgian Rivers, Lakes, Fish Farms	GW1-2; GW1-5; GW3-10; GW7-1; AW7-24; BW8-44; DW9-1; LW9-23; MW9-31; AW7-13; BW8-36; MW9-41;
		Diseased Fish from Georgian Farms	GF1-4; AF1-6; NF4-3; NF4-4; SF5-19; NF7-27; NF7-28; EF10-3; EF10-4; EF10-9; Iv24; N19; N37; N47; N48; N 53; AF2-5; GF3-1; AF4-7; SF5-18; Iv2; Iv3; Iv5
		Georgian Patients	a1; a2 a4; a5
<i>Aeromonas caviae</i>	5	Georgian Fish Farm Water	SW5-47; AW6-5; GW6-47; GW6-48; AW6-72
<i>Aeromoans sobria</i>	2	Georgian Fish Farm Water	GW1-3; AW2-1
<i>Aeromonas hydrophila*</i>	1	River Water	CIP103770*
<i>Aeromonas salmonicida*</i>	2	Fish	CIP 104001T*; CIP 103209T*

\* *Aeromonas hydrophila* CIP103770, *Aeromonas salmonicida* CIP 104001T and *Aeromonas salmonicida* CIP 103209T from collection of Institute Pasteur

Table S2: Lytic activity of Bacteriophage AhMtk13a and AhMtk13b

N	Bacterial Isolate	AhMtk13a	AhMtk13b	Sours of isolation
1	<i>A. hydriphila GW1-2</i>	IP	R	Water
2	<i>A. hydriphila GF1-4</i>	CL	IP	Fish
3	<i>A. hydriphila GW1-5</i>	CL	R	Water
4	<i>A. hydriphila AF1-6</i>	CL	R	Fish
5	<i>A. hydriphila AF2-5</i>	R	R	Fish
6	<i>A. hydriphila GF3-1</i>	R	R	Fish
7	<i>A. hydriphila GW3-10</i>	CL	CL	Water
8	<i>A. hydriphila NF4-3</i>	CL	R	Fish
9	<i>A. hydriphila NF4-4</i>	CL	R	Fish
10	<i>A. hydriphila AF4-7</i>	R	R	Fish
11	<i>A. hydriphila SF5-18</i>	R	R	Fish
12	<i>A. hydriphila SF5-19</i>	CL	IP	Fish
13	<i>A. hydriphila GW7-1</i>	SCL	SCL	Water
14	<i>A. hydriphila AW7-13</i>	R	R	Water
15	<i>A. hydriphila AW7-24</i>	SCL	SCL	Water
16	<i>A. hydriphila NF7-27</i>	SCL	R	Fish
17	<i>A. hydriphila NF7-28</i>	CL	CL	Fish
18	<i>A. hydriphila BW8-36</i>	R	R	Water
19	<i>A. hydriphila BW8-44</i>	CL	SCL	Water
20	<i>A. hydriphila DW9-1</i>	SCL	R	Water
21	<i>A. hydriphila LW9-23</i>	SCL	R	Water
22	<i>A. hydriphila MW9-41</i>	R	SCL	Water
23	<i>A. hydriphila MW9-31</i>	OL	R	Water
24	<i>A. hydriphila EF10-3</i>	SCL	R	Fish
25	<i>A. hydriphila EF10-4</i>	SCL	R	Fish
26	<i>A. hydriphila EF10-9</i>	SCL	OL	Fish
27	<i>A. hydriphila Iv2</i>	R	R	Fish
28	<i>A. hydriphila Iv3</i>	R	R	Fish
29	<i>A. hydriphila Iv5</i>	R	R	Fish
30	<i>A. hydriphila Iv24</i>	CL	IP	Fish
31	<i>A. hydriphila N19</i>	SCL	R	Fish
32	<i>A. hydriphila N37</i>	SCL	SCL	Fish
33	<i>A. hydriphila N47</i>	SCL	R	Fish
34	<i>A. hydriphila N48</i>	SCL	R	Fish

35	<i>A. hydrophila</i> N53	SCL	SCL	Fish
36	<i>A. hydrophila</i> a1(urine)	SCL	SCL	Human
37	<i>A. hydrophila</i> a2(nasal cavity)	R	R	Human
38	<i>A. hydrophila</i> a4 (sperm)	SCL	R	Human
39	<i>A. hydrophila</i> a5(urine)	SCL	R	Human
40	<i>A. hydrophila</i> CIP103770	SCL	R	Water
41	<i>A. caviae</i> SW5-47	R	R	Fish
42	<i>A. caviae</i> AW6-5	R	R	Fish
43	<i>A. caviae</i> GW6-47	R	R	Fish
44	<i>A. caviae</i> GW6-48	R	R	Fish
45	<i>A. caviae</i> AW6-72	R	R	Fish
46	<i>A. sobria</i> GW1-3	R	R	Fish
47	<i>A. sobria</i> AW2-1	R	R	Fish
48	<i>A. salmonicida</i> CIP104001T	R	R	Fish
49	<i>A. salmonicida</i> CIP 103209T	R	R	Fish

CL, confluent lysis;

SCL, semi-confluent lysis;

OL, overgrown lysis;

IP, individual plaques;

R, Resistant;